

Substitute for form 1449A/PTO (Modified)				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/588,587
				Filing Date	August 4, 2006
				First Named Inventor	WESTBERRY, Ryan
				Art Unit	To be assigned
				Examiner Name	To be assigned
Sheet	1	of	2	Attorney Docket Number	Docket # 34029/US/2 (469981-00116)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	US 4,458,006	7/03/84	Donges et al.	
	A2	US 4,683,195	7/28/87	Mullis, et al	
	A3	US-4,683,202	7/28/87	Mullis, et al.	
	A4	US-4,737,462	4/12/98	Mark et al	
	A5	US 5,409,818	4/25/95	Davey et al	
	A6	US 5,455,166	10/03/95	Walker	
	A7	US-5,925,540	7/20/99	Caceci	
	A8	2007/0264633-A1	11/15/2007	Westberry et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ² Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	B1	† WO 92/12722 A1	6/08/92	Rubinsky et al.		

NON PATENT LITERATURE DOCUMENTS				T ⁶
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
	C1	BAUER et al. "A genetic enrichment for mutations constructed by oligodeoxynucleotide-directed mutagenesis", <i>Gene</i> 37:73 (1985)		
	C2	BEAUCAGE et al., "Deoxynucleoside phosphoramidites - a new class of key intermediates for deoxypolynucleotide synthesis" <i>Tetrahedron Letters</i> 22:1859-1862 (1981)		
	C3	BRAASCH and COREY "Locked Nucleic Acids: Fine-tuning nucleic acid recognition" <i>Chem. Biol.</i> 2001,8(1):1-7		
	C4	CRAIK, 1985 "Use Of Oligonucleotides For Site-specific Mutagenesis" <i>Biotechniques</i> , 12-19,		
	C5	DEVRIES, (1969) "Freezing Resistance in Some Antarctic Fishes" <i>Science</i> 163, 1073-1075		
	C6	FLETCHER et al. "Antifreeze proteins and their genes: From basic research to business opportunity", (1999) <i>CHEMTECH</i> 30(6):17-28		
	C7	DONAHUE, K. "Ultrarapid, highly efficient viral gene transfer to the heart," <i>Proc. Natl Acad. Sci. USA</i> Vol. 94, pp.4664-4668 April 1997		
	C8	JIA et al., "Antifreeze proteins: an unusual receptor-ligand interaction" <i>TRENDS in Biochem Sciences</i> , 27:2, 101-106		
	C9	LEE et al., "Allelic discrimination by nick-translation PCR with fluorescent probes" 1993 <i>Nucleic Acids Res.</i> , 21(16:3761.6)		
	C10	MANIATIS, et al., <i>Molecular Cloning: A Laboratory Manual</i> , (New York: Cold Spring Harbor Laboratory pp.280-281)1982		

Examiner Signature	/Christopher Babic/	Date Considered	07/18/2010
--------------------	---------------------	-----------------	------------

*EXAMINER: † These references were previously cited in a related application relied upon for an earlier filing date under 35 USC 120 and no copies are submitted in accordance with 37 CFR 1.98(d). Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English Language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending on the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and selection option 2

Substitute for form 1449A/PTO (Modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/588,587
				Filing Date	August4, 2006
				First Named Inventor	WESTBERRY, Ryan
				Art Unit	To be assigned
				Examiner Name	To be assigned
Sheet	2	of	2	Attorney Docket Number	Docket # 34029/US/2 (469981-00116)

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
	C11	MOK et al., "The Escherichia coli Preprimosome and DnaB Helicase Can Form Replication Forks that Move at the Same Rate," <i>J. Biol. Chem.</i> 262:16558-16565 (1987)		
	C12	NEILSEN et al., "Peptide Nucleic Acid (PNA): A DNA Mimic with a Peptide Backbone", <i>Bioconjug. Chem.</i> 1994; 5(1):3-7		
	C13	RADDING, C." Homologous Pairing and Strand Exchange in Genetic Recombination", <i>Ann. Rev. Genetics</i> , 16:405-37 (1982)		
	C14	SAMBROOK et al., 1989, <i>Molecular Cloning: A Laboratory Manual</i> , 18.1-18.88		
	C15	† UPRETI et al., "Enzyme leakage during cryopreservation of ram spermatozoa", <i>Animal Reproductive Science</i> 414 (1996) 27-36		
	C16	† VAJADA, T. "Cryo-biorganic chemistry:molecular interactions at low temperatures" <i>Cellular and Molecular Life Sciences</i> 56 (1999) 398-414		
	C17	WALDER et al., "Oligodeoxynucleotide-mutagenesis using the yeast transformation system", 1986 <i>Gene</i> , 42:133		
	C18	YUZHAKOU et al., "Replisome Assembly Reveals the Basis for Asymmetric Function in Leading and Lagging Strand Replication", <i>Cell</i> 86:877-886 (1996)		

Examiner Signature	/Christopher Babic/	Date Considered	07/18/2010
--------------------	---------------------	-----------------	------------

*EXAMINER: † These references were previously cited in a related application relied upon for an earlier filing date under 35 USC 120 and no copies are submitted in accordance with 37 CFR 1.98(d). Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English Language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending on the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and selection option 2